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10/774,306

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Gjalt Gerrit De Jong

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54120

7590

08/15/2008

RESEARCH IN MOTION

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EXAMINER

NGUYEN, BRIAN D

ART UNIT

PAPER NUMBER

2616

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/774,306	<b>Applicant(s)</b> DE JONG ET AL.	
	<b>Examiner</b> BRIAN D. NGUYEN	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-13 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-22 is/are allowed.
- 6) ☒ Claim(s) 1-6,8-13,15 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION*****Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 8-13 and 16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application No.

12/014,550. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the limitations claimed in this application is also claimed in

Application No. 12/014,550 except that the limitation “submitting, from the RRC layer, an SDU to RLC layer for transmission” in the body of claims 1, 4, and 8 of 12/014,550 is included in the preamble of this application. It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 and 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Yi et al (2003/0007459).

Regarding claim 1, Yi discloses a method of operating a device in a mobile communications network (par. 0003, lines 1-3, method for re-transmitting data or control information in the radio link control layer of an IMT-2000 radio communication system), the device operating using a protocol (par. 0015 protocol data unit) having a physical layer (fig. 1, Transport Channel PHY; par. 0011, line 5, Physical Layer), a user layer (par. 0011, line 5, user plane) and at least an RRC (radio resource control) layer (fig. 1, RRC (third layer)) and an RLC (radio link control) layer (fig. 1, RLC (second layer)) of a UMTS system (par. 0006, lines 7-10, UMTS), wherein the RRC layer is arranged to submit (fig. 1, connection between RRC and RLC) an SDU (fig. 2, RLC SDU; par. 0019, lines 1-4, RLC SDU comes from the upper layer) to the RLC layer (par. 0019, lines 1-5, RLC layer performs segmentation and concatenation of the RLC SDU) for communication (par. 001.5, transmitted to the MAC layer) using the physical layer (fig. 1, connections among RRC layer, RLC layer and Transport Channel PHY), wherein

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said SDU comprises information (par. 0005, lines 15-18, multimedia services, such as voice, video, and data) indicative of a process (par. 0005, lines 15-18, multimedia services, such as voice, video, and data), the method comprising in response to a signal (par. 0024, RLC layer receives the state information with which success of transmission can be judged; par. 0058, line 4, sender reports the status) from said RLC layer (par. 0024, RLC layer receives the state information with which success of transmission can be judged), said signal being indicative of discard (par. 0024, RLC layer receives the state information with which success of transmission can be judged) of said SDU, causing said RRC layer to resubmit (par. 0085, lines 10-11, the information is re-transmitted) said SDU to said lower layer a predetermined number N (par. 0085, lines 12-15, when the state variable becomes same as or larger than the critical value, the retransmission process is terminated; fig. 7, process steps 71, 72, 73, 74, 75) of times; and in response to N further signals (fig. 7, process steps 71, 72, 73, 74, 75) indicative (fig. 7, transmission success question step 73) of said discard, causing said RRC layer to submit (par. 0082, lines 11-13, the sender sends a reset instruction for instructing reset of the radio link control layer to the receiver) to said RLC layer (par. 0093, lines 13-14, error processing process, such as reset of the RLC layer) a failure response message (par. 0093, line 13, error processing process) indicative that said process indicated by the information of the SDU has failed (par. 0093, lines 12-14, the value of VT (MRW) becomes the same as or larger than the critical value).

Regarding claim 2, Yi further comprising setting an operating mode (par. 0024, lines 1-2, acknowledged mode) wherein an acknowledgement (par. 0027, line 6, positive acknowledgement) of successful reception (par. 0027, line 5, received RLC PDU) of said SDU is awaited (par. 0024, lines 1-2, acknowledged mode).

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Regarding claim 3, Yi discloses wherein  $N=0$  (par. 0023, lines 1-3, unacknowledged mode, wherein re-transmission is not supported). The examiner notes that having no re-transmission is equivalent to re-transmitting zero times.

Regarding claim 4, Yi discloses wherein if said RLC layer discards (par. 0041, lines 6-9, RESET ACK PDU not received) said failure response message (par. 0041, line 5, RESET PDU), said method further comprises causing said RRC layer to resubmit (par. 0041, lines 8-9, an identical RESET PDU is retransmitted) said SDU to said RLC layer a predetermined number of times (par. 0042, lines 1-2, VT (RST) represents the number that the RST instruction is sent); and in response to N further signals (par. 0042, lines 1-2, VT (RST) represents the number that the RST instruction is sent) indicative of said discard (par. 0042, lines 1-3, VT (RST) represents the number that the RST instruction is sent and the value is increased by one whenever the sender sends the RESET PDU), submitting (par. 0042, lines 5-6, notifies such condition to the upper layer) by said RRC layer to said RLC layer of a CELL UPDATE (par. 0042, line 5, further restoration is impossible) indicative of an unrecoverable error (par. 0042, line 5, further restoration is impossible) in said RLC layer for emission in response thereto.

Regarding claim 5, Yi discloses wherein if said RLC layer discards (par. 0041, lines 6-9, RESET ACK PDU not received) said failure response message (par. 0041, line 5, RESET PDU), said method further comprises submitting (par. 0041, lines 1-4, reset instruction is performed by sending the RESET PDU to the receiver) by said RRC layer to said RLC layer of a CELL UPDATE message (par. 0041, line 2, RESET PDU) arranged to cause the network control device to emit for said user device a CELL UPDATE CONFIRM message (par. 0041, line 2,

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RESET PDU) arranged to cause said user device to reconfigure to a determined state (par. 0039, lines 4-5, resets the operation of the RLC layer; fig. 5, process steps 51-55).

Regarding claim 8, Yi discloses a method of operating a device in a mobile communications network (par. 0003, lines 1-3, method for re-transmitting data or control information in the radio link control layer of an IMT-2000 radio communication system), the device operating using a protocol (par. 0015 protocol data unit) having a physical layer (fig. 1, Transport Channel PHY; par. 0011, line 5, Physical Layer), a user layer (par. 0011, line 5, user plane) and at least an RRC (radio resource control) layer (fig. 1, RRC (third layer)) and an RLC (radio link control) layer (fig. 1, RLC (second layer)) of a UMTS system (par. 0006, lines 7-10, UMTS), wherein the RRC layer is arranged to submit (fig. 1, connection between RRC and RLC) an SDU (fig. 2, RLC SDU; par. 0019, lines 1-4, RLC SDU comes from the upper layer) to the RLC layer (par. 0019, lines 1-5, RLC layer performs segmentation and concatenation of the RLC SDU) for communication (par. 0015, transmitted to the MAC layer) using the physical layer (fig. 1, connections among RRC layer, RLC layer and Transport Channel PHY), wherein said SDU comprises information (par. 0005, lines 15-18, multimedia services, such as voice, video, and data) indicative of a process (par. 0005, lines 15-18, multimedia services, such as voice, video, and data), the method comprising in response to a submission of an SDU (par. 0019, lines 1-2, RLC SDU which comes from the upper layer; fig. 1, RRC is upper layer) by said RRC layer to said RLC layer (fig. 1, lines connecting RRC and RLC), starting a timing process (par. 0038, lines 3-4, sender drives Timer\_MRW) in the RRC layer (par. 0017, lines 3-7, RRC functions); in response (par. 0038, information is re-transmitted) to an indication that the timing process has reached a predetermined timeout (par. 0038, line 7 timer is expired), causing said

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RRC layer to resubmit (par. 0038, line 8, information is re-transmitted) said SDU to said RLC layer a predetermined number N of times (par. 0039, MaxMRW), on each occasion starting said timing process (fig. 5, process step 54, checking Timer\_MRW); and in response to N further timeout signals (par. 0039, MaxMRW), causing said RRC layer to submit to said RLC layer a failure response message (par. 0041, line 2, RESET PDU) indicative that said process indicated by the information of the SDU has failed (par. 0039, MRW instruction can no longer be performed and resets the operation of the RLC layer).

Regarding claim 9, Yi discloses the method further comprising setting an operating mode (par. 0024, lines 1-2, acknowledged mode) wherein an acknowledgement (par. 0027, line 6, positive acknowledgement) of successful reception (par. 0027, line 5, received RLC PDU) of said SDU is awaited (par. 0024, lines 1-2, acknowledged mode).\

Regarding claim 10, Yi discloses wherein  $N=0$  (par. 0023, lines 1-3, unacknowledged mode, wherein re-transmission is not supported). The examiner notes that having no re-transmission is equivalent to re-transmitting zero times.

Regarding claim 11, Yi discloses wherein in response (par. 0041, line 1, reset instruction is performed) to said RRC layer submitting to said RLC layer a said failure response message, said timer process is started (fig. 6, process step 64, TimerRST) and in response to timeout of said timer process (fig. 6, process step 64, checking Timer\_RST), said method further comprises causing said RRC layer to resubmit (fig. 6, process step 62, transmitting RESET PDU) said SDU to said RLC layer a predetermined number N of times (fig. 6, process step 63, MaxRST), on each occasion restarting said timer process (fig. 6, loop comprising process steps 61-65); and in response to N further timeout signals (par. 0042, MaxRST), submitting by said RRC layer to said



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RLC layer of a CELL UPDATE (par. 0042, line 5, further restoration is impossible) indicative of an unrecoverable error (par. 0042, line 5, further restoration is impossible) in said RLC layer for emission in response thereto.

Regarding claim 12, Yi discloses wherein if said RLC layer discards (par. 0041, lines 6-9, RESET ACK PDU not received) said failure response message (par. 0041, line 5, RESET PDU), said method further comprises submitting (par. 0041, lines 1-4, reset instruction is performed by sending the RESET PDU to the receiver) by said RRC layer to said RLC layer of a CELL UPDATE (par. 0041, line 2, RESET PDU) arranged to cause the network control device to emit for said user device a CELL UPDATE CONFIRM (par. 0041, line 2, RESET PDU) message arranged to cause said user device to reconfigure to a determined state (par. 0039, lines 4-5, resets the operation of the RLC layer; fig. 5, process steps 51-55).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yi in view of Brame et al (5,253,253).

Regarding claim 6, wherein if said RLC layer discards (par. 0041, lines 6-9, RESET ACK PDU not received) said failure response message (par. 0041, line 5, RESET PDU).

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Regarding claim 13, wherein in response to said RRC layer submitting to said RLC layer a said failure response message (par. 0041, line 2, RESET PDU), said timer process is started (fig. 6, process step 64, Timer\_RST).

Yi et al does not disclose the following features:

Regarding claim 6, said method further comprises releasing connection between peer layers at the said device and the said network and entering an idle mode.

Regarding claim 13, said method further comprises releasing connection between peer layers at the said device and the said network and entering an idle mode.

Brame et al discloses a message bus slot update/idle control in RF trunking multisite switch, comprising the following features:

Regarding claim 6, said method further comprises releasing connection (col. 5, line 8, connections are terminated) between peer layers (fig. 4, call to console) at the said device and the said network and entering an idle mode (col. 5, line 7, slot idle messages).

Regarding claim 13, and in response to timeout (fig. 6, process step 63, MaxRST) of said timer process said method further comprises releasing connection (col. 5, line 8, connections are terminated) between peer layers (fig. 4, call to console) at the said device and the said network and entering an idle mode (col. 5, line 7, slot idle messages).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Yi et al by using the features, as taught by Brame et al, in order to allow a caller in one site area to communicate with a callee in another area (Brame et al, col. 2, lines 16-19).

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7. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yi in view of Odenwalder et al (2002/0159410).

Yi et al further discloses the following features:

Regarding claim 15, wherein if said RLC layer discards (par. 0041, lines 6-9, RESET ACK PDU not received) said failure response message (par. 0041, line 5, RESET PDU).

Regarding claim 16, wherein in response to said RRC layer submitting to said RLC layer a said failure response message (par. 0041, line 2, RESET PDU), said timer process is started (fig. 6, process step 64, TimerRST).

Yi et al does not disclose the following features:

Regarding claim 15, setting said RRC to a condition the RRC was in before sending said failure response message.

Regarding claim 16, setting said RRC to a condition the RRC was in before sending said failure response message.

Odenwalder et al discloses rescheduling scheduled transmissions, comprising the following features:

Regarding claim 15, setting said RRC to a condition the RRC was in before sending said failure response message (par. 0058, lines 14-16, the base station ignores the ACK signal and continues with the scheduled retransmissions).

Regarding claim 16, setting said RRC to a condition the RRC was in before sending said failure response message (par. 0058, lines 14-16, the base station ignores the ACK signal and continues with the scheduled retransmissions).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Yi et al by using the features, as taught by Odenwalder et al, in order to provide enhancement of a transmission schedule (Odenwalder et al, par. 0009, lines 1-2).

***Allowable Subject Matter***

8. Claims 17-22 are allowed.

***Response to Arguments***

9. Applicant's arguments filed 3/25/08 have been fully considered but they are not persuasive.

The applicant argued that if, in fact, N were equal to zero, then it is submitted that Claim 1 would read, in pertinent part, as follows:

*"in response to a signal from said RLC layer, said signal being indicative of discard of said SDU, ... causing said RRC layer to submit to said RLC layer a failure response message indicative that said process indicated by the information of the SDU has failed."*

The examiner respectfully disagrees because the claim claims:

*"in response to a signal from said RLC layer, said signal being indicative of discard of said SDU, causing said RRC layer to resubmit said SDU to said RLC layer a predetermined number N of times; and*

*in response to N further signals indicative of said discard, causing said RRC layer to submit to said RLC layer a failure response message indicative that said process indicated by the information of the SDU has failed."*

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The difference between the applicant's argument and the claim is that the claim claims *causing said RRC layer to submit to said RLC layer a failure response message indicative that said process indicated by the information of the SDU has failed **in response to N further signals indicative of said discard*** while the applicant's argument is: *causing said RRC layer to submit to said RLC layer a failure response message indicative that said process indicated by the information of the SDU has failed **in response to a signal from said RLC layer, said signal being indicative of discard of said SDU.***

Note that when N is equal to zero the RRC layer does not resubmit the SDU to the RLC layer and the RRC layer does not submit to the RLC layer a failure response message.

The same argument is applied to claim 8.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN D. NGUYEN whose telephone number is (571)272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

8/13/08

/Brian D Nguyen/

Primary Examiner, Art Unit 2616